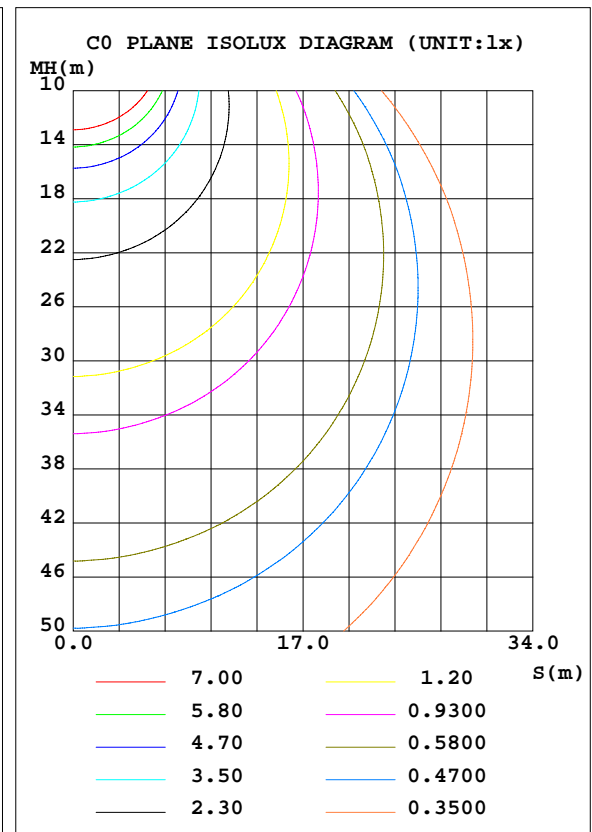
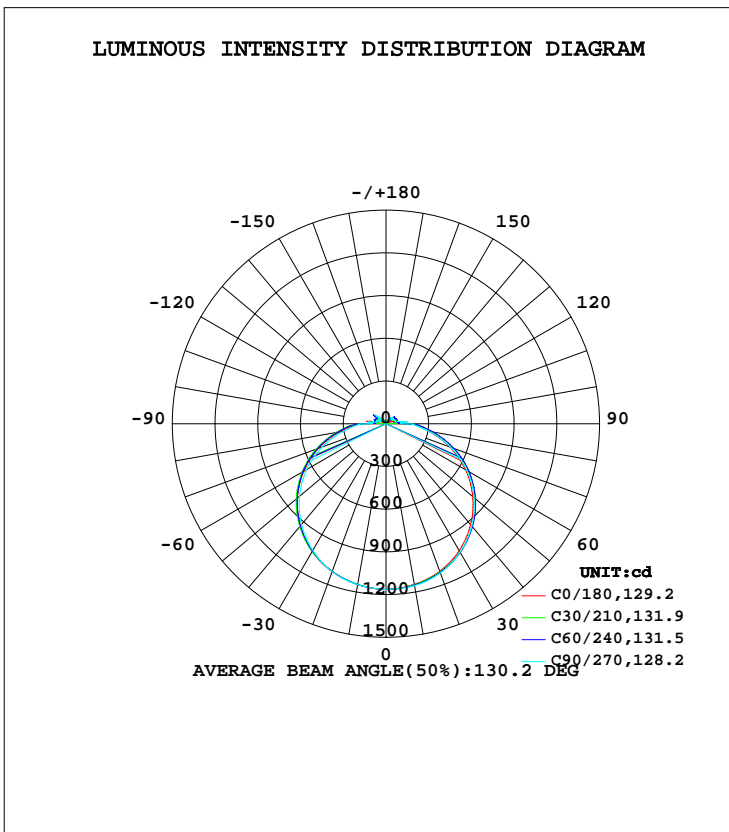


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.94 lm/W			
MODEL	ASD-LFL01-22D4040	I _{max} (cd)	1164	S/MH(C0/180)	1.33
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	4547.1	η UP, DN(C0-180)	4.0,46.2
NOMINAL FLUX(lm)	4547.06	CIE CLASS	DIRECT	η UP, DN(C180-360)	3.9,45.8
LAMPS INSIDE	1	η up(%)	8.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	92.0	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1145	1149	1154	1151	1147	1145	1147	1144	0- 10	110.3	110.3	2.43,2.43
20	1103	1112	1115	1112	1106	1104	1104	1102	10- 20	319.6	429.9	9.45,9.45
30	1029	1046	1042	1047	1036	1036	1028	1033	20- 30	496.3	926.1	20.4,20.4
40	924.7	948.6	937.1	952.9	936.5	941.5	923.2	934.8	30- 40	620.0	1546	34,34
50	794.8	825.2	807.3	832.7	812.3	821.2	793.2	811.3	40- 50	677.4	2224	48.9,48.9
60	644.8	679.1	655.6	690.0	666.8	679.9	645.4	665.9	50- 60	663.6	2887	63.5,63.5
70	476.2	514.5	483.6	528.8	503.6	521.2	477.4	503.8	60- 70	580.5	3468	76.3,76.3
80	304.6	344.1	304.4	358.5	331.7	355.2	303.3	337.1	70- 80	440.1	3908	85.9,85.9
90	100.5	121.0	109.6	138.5	175.2	152.8	123.1	94.42	80- 90	277.3	4185	92,92
100	77.25	73.16	85.55	72.43	100.4	71.38	67.89	72.19	90-100	93.58	4279	94.1,94.1
110	53.47	85.01	65.87	85.96	59.75	84.68	54.30	74.63	100-110	78.19	4357	95.8,95.8
120	42.71	83.12	59.45	80.69	49.71	105.6	45.72	100.3	110-120	67.48	4424	97.3,97.3
130	38.79	39.55	54.94	45.07	42.44	31.00	94.41	28.37	120-130	54.12	4478	98.5,98.5
140	35.43	39.38	22.72	48.95	37.57	44.81	35.44	43.13	130-140	34.43	4513	99.2,99.2
150	18.71	27.89	23.56	27.20	29.18	29.33	5.169	35.58	140-150	20.32	4533	99.7,99.7
160	21.90	19.62	14.21	23.55	13.46	24.49	18.85	25.63	150-160	9.263	4542	99.9,99.9
170	10.74	5.184	6.160	4.728	11.37	4.797	6.272	4.071	160-170	3.805	4546	100,100
180	11.51	11.99	12.54	12.18	11.51	11.99	12.54	12.20	170-180	0.7522	4547	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 19.1 %									UNIT:lm		

Conical surface Flux(90deg): 1882.1 lm

%lum = 41.4%
 %lamp = 41.4%

Conical surface Flux(120deg): 2887.1 lm

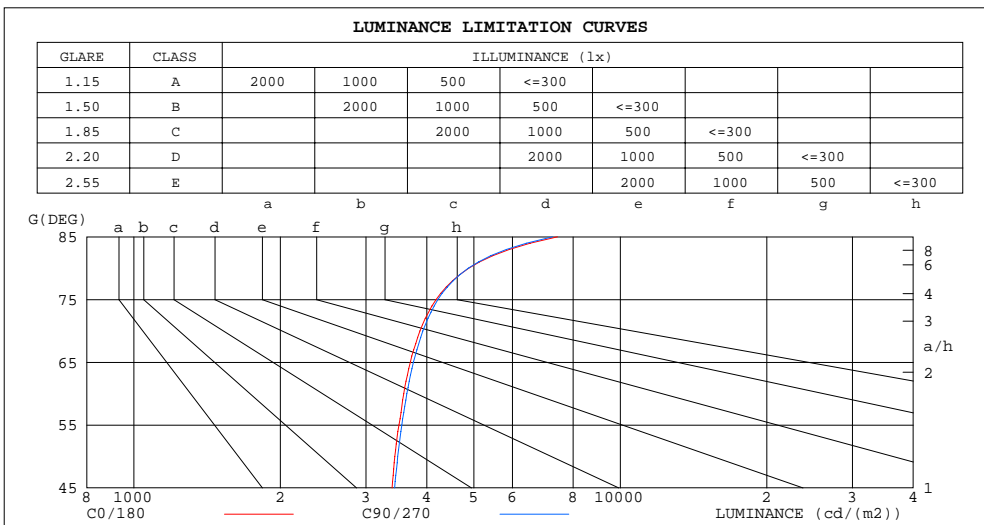
%lum = 63.5%
 %lamp = 63.5%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7427	7252
80	4879	4868
75	4180	4216
70	3873	3926
65	3700	3756
60	3587	3641
55	3508	3554
50	3439	3487
45	3394	3435

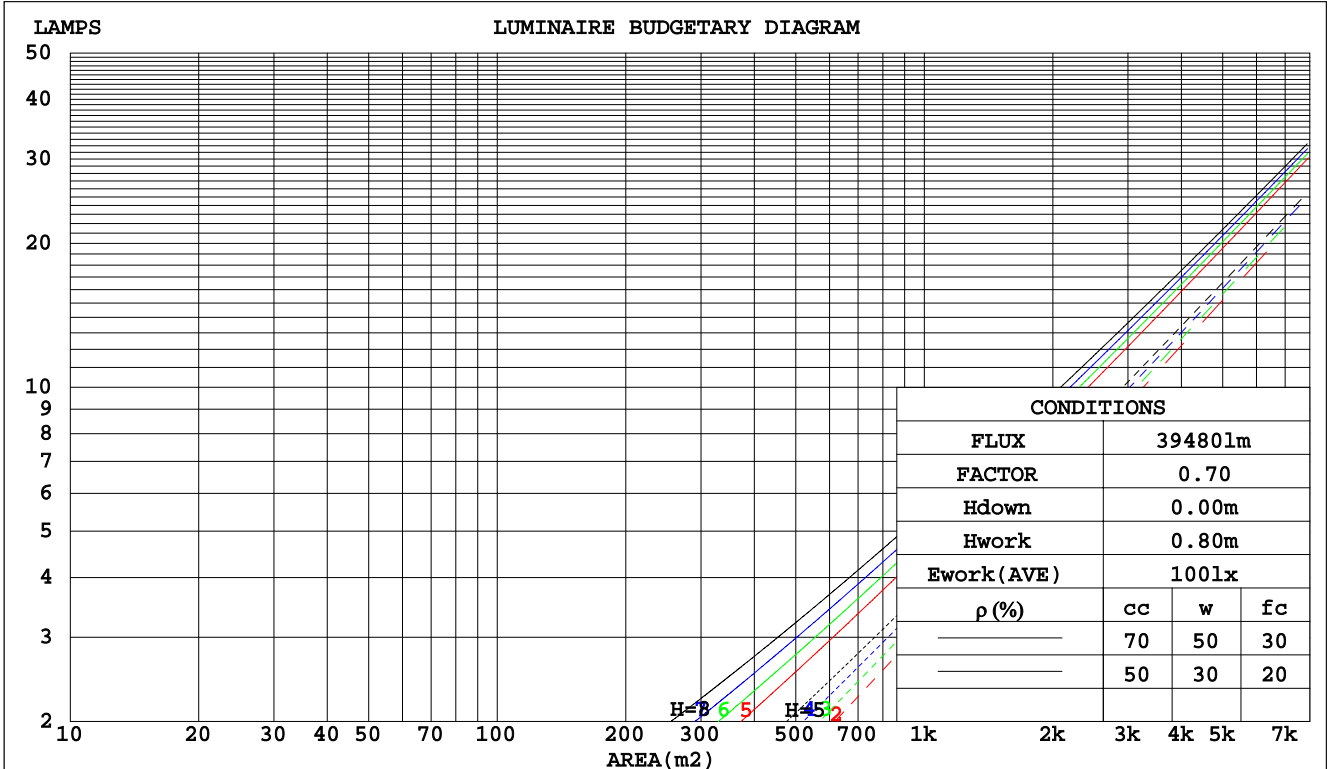
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Derek Lai
 Test Date: 09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance: 2.500m [K=1.0621]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.00	1.00	1.00	.95	.95	.95	.92
1.0	.99	.94	.89	.96	.91	.87	.90	.86	.82	.84	.81	.78	.80	.77	.75	.72
2.0	.85	.77	.70	.82	.75	.69	.77	.71	.66	.72	.68	.63	.68	.64	.61	.58
3.0	.73	.64	.57	.71	.63	.56	.67	.60	.54	.63	.57	.52	.60	.55	.50	.48
4.0	.65	.55	.48	.63	.54	.47	.59	.51	.45	.56	.49	.44	.53	.47	.43	.40
5.0	.57	.48	.41	.56	.47	.40	.53	.45	.39	.50	.43	.38	.47	.41	.37	.34
6.0	.51	.42	.35	.50	.41	.35	.47	.39	.34	.45	.38	.33	.42	.36	.32	.30
7.0	.46	.37	.31	.45	.37	.30	.43	.35	.30	.41	.34	.29	.39	.33	.28	.26
8.0	.42	.33	.27	.41	.33	.27	.39	.32	.26	.37	.30	.26	.35	.29	.25	.23
9.0	.39	.30	.24	.38	.30	.24	.36	.29	.24	.34	.28	.23	.33	.27	.22	.20
10.0	.35	.27	.22	.35	.27	.22	.33	.26	.21	.32	.25	.21	.30	.24	.20	.18



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.373	.212	.067	.363	.207	.066	.345	.198	.063	.328	.189	.061	.313	.181	.058	
2.0	.329	.181	.055	.321	.177	.054	.305	.169	.053	.290	.162	.051	.276	.156	.049	
3.0	.295	.157	.047	.288	.154	.046	.273	.148	.045	.260	.142	.044	.247	.137	.042	
4.0	.267	.139	.041	.260	.136	.040	.247	.131	.039	.235	.126	.038	.224	.122	.037	
5.0	.244	.124	.036	.238	.122	.036	.226	.118	.035	.215	.113	.034	.205	.109	.033	
6.0	.224	.112	.032	.218	.110	.032	.208	.106	.031	.198	.103	.030	.188	.099	.029	
7.0	.207	.102	.029	.202	.100	.029	.192	.097	.028	.183	.094	.027	.175	.091	.027	
8.0	.192	.094	.026	.187	.092	.026	.179	.089	.025	.170	.086	.025	.163	.084	.024	
9.0	.179	.087	.024	.175	.085	.024	.167	.083	.023	.159	.080	.023	.152	.077	.022	
10.0	.168	.080	.022	.164	.079	.022	.157	.077	.022	.150	.074	.021	.143	.072	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.251	.251	.251	.215	.215	.215	.146	.146	.146	.084	.084	.084	.027	.027	.027	
1.0	.246	.217	.191	.210	.186	.164	.144	.128	.113	.083	.074	.066	.027	.024	.021	
2.0	.239	.193	.155	.205	.166	.134	.140	.115	.093	.081	.067	.055	.026	.022	.018	
3.0	.231	.176	.133	.198	.152	.115	.136	.106	.081	.079	.062	.048	.025	.020	.016	
4.0	.223	.164	.118	.192	.141	.102	.132	.098	.072	.076	.058	.043	.025	.019	.014	
5.0	.216	.154	.108	.185	.133	.094	.128	.093	.066	.074	.054	.039	.024	.018	.013	
6.0	.208	.145	.100	.179	.126	.087	.124	.088	.062	.072	.052	.037	.023	.017	.012	
7.0	.201	.139	.095	.173	.120	.083	.120	.084	.059	.069	.050	.035	.022	.016	.012	
8.0	.194	.133	.091	.167	.115	.079	.116	.081	.056	.067	.048	.033	.022	.016	.011	
9.0	.188	.128	.088	.162	.111	.076	.112	.078	.054	.065	.046	.032	.021	.015	.011	
10.0	.182	.124	.085	.157	.108	.074	.109	.076	.053	.064	.045	.031	.021	.015	.010	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm										
NAME: ASD-LFL01-22D4040					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting corp					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	11.6	13.1	12.0	13.4	13.8	11.6	13.1	12.0	13.5	13.9
3H	13.6	15.0	14.0	15.4	15.8	13.7	15.0	14.1	15.4	15.8
4H	14.6	15.9	15.0	16.3	16.7	14.6	16.0	15.1	16.4	16.8
6H	15.5	16.8	16.0	17.2	17.7	15.6	16.8	16.0	17.2	17.7
8H	16.0	17.2	16.5	17.7	18.1	16.0	17.3	16.5	17.7	18.2
12H	16.5	17.7	17.0	18.2	18.6	16.5	17.7	17.0	18.2	18.6
4H 2H	12.4	13.7	12.8	14.1	14.5	12.4	13.7	12.8	14.1	14.6
3H	14.6	15.8	15.1	16.2	16.7	14.6	15.8	15.1	16.3	16.7
4H	15.7	16.8	16.2	17.3	17.8	15.8	16.9	16.3	17.3	17.8
6H	16.9	17.8	17.4	18.3	18.9	16.9	17.9	17.4	18.4	18.9
8H	17.5	18.4	18.0	18.9	19.4	17.5	18.4	18.0	18.9	19.4
12H	18.1	18.9	18.6	19.4	20.0	18.1	18.9	18.6	19.4	20.0
8H 4H	16.3	17.2	16.8	17.7	18.2	16.3	17.2	16.8	17.7	18.3
6H	17.7	18.4	18.2	19.0	19.6	17.7	18.4	18.2	19.0	19.6
8H	18.4	19.1	19.0	19.7	20.3	18.4	19.1	19.0	19.7	20.3
12H	19.2	19.8	19.8	20.4	21.1	19.2	19.8	19.8	20.4	21.0
12H 4H	16.3	17.2	16.9	17.7	18.3	16.4	17.2	16.9	17.7	18.3
6H	17.9	18.5	18.4	19.1	19.7	17.9	18.5	18.4	19.1	19.7
8H	18.7	19.3	19.3	19.9	20.5	18.7	19.3	19.3	19.9	20.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 4547 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.3)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

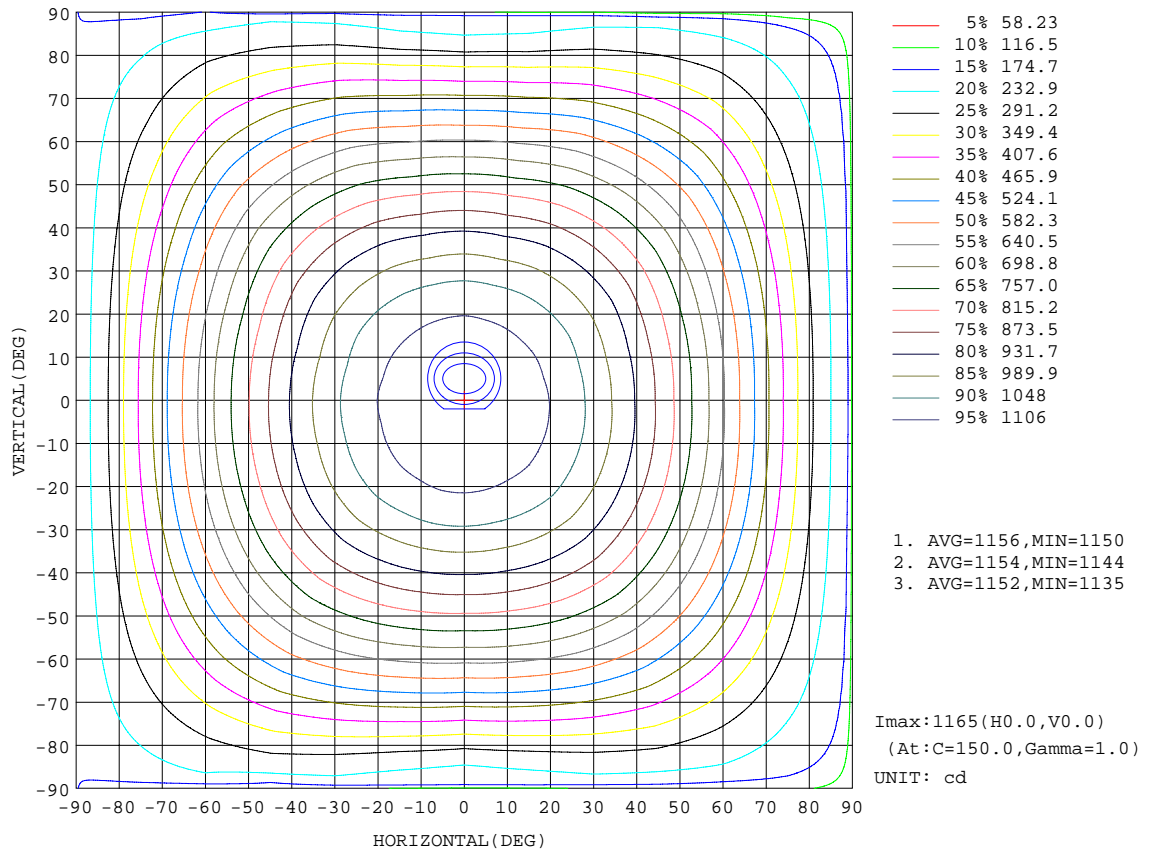
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	39	32	50	39	32	49	38	31	24
0.80	61	48	40	60	48	40	57	46	39	32
1.00	69	56	48	67	56	48	64	57	47	39
1.25	76	64	56	74	63	55	70	61	54	45
1.50	81	70	61	79	68	61	75	66	59	50
2.00	88	78	70	86	76	69	81	73	67	57
2.50	93	83	76	90	81	75	85	78	72	61
3.00	96	88	81	93	86	80	88	82	77	65
4.00	101	94	88	98	91	86	92	87	82	71
5.00	104	97	92	100	95	90	94	90	86	74
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corpo	SUR.:	Shielding Angle:

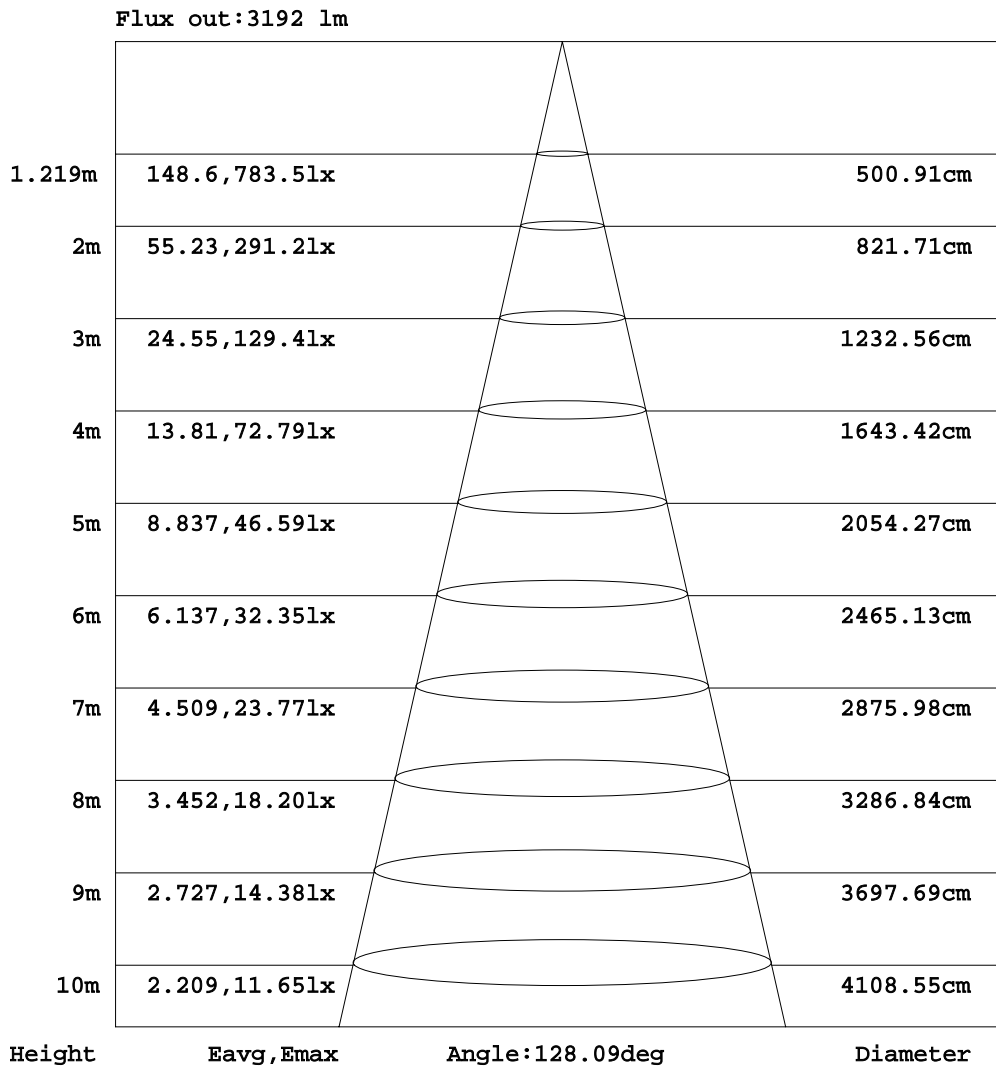


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

AAI Figure

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:



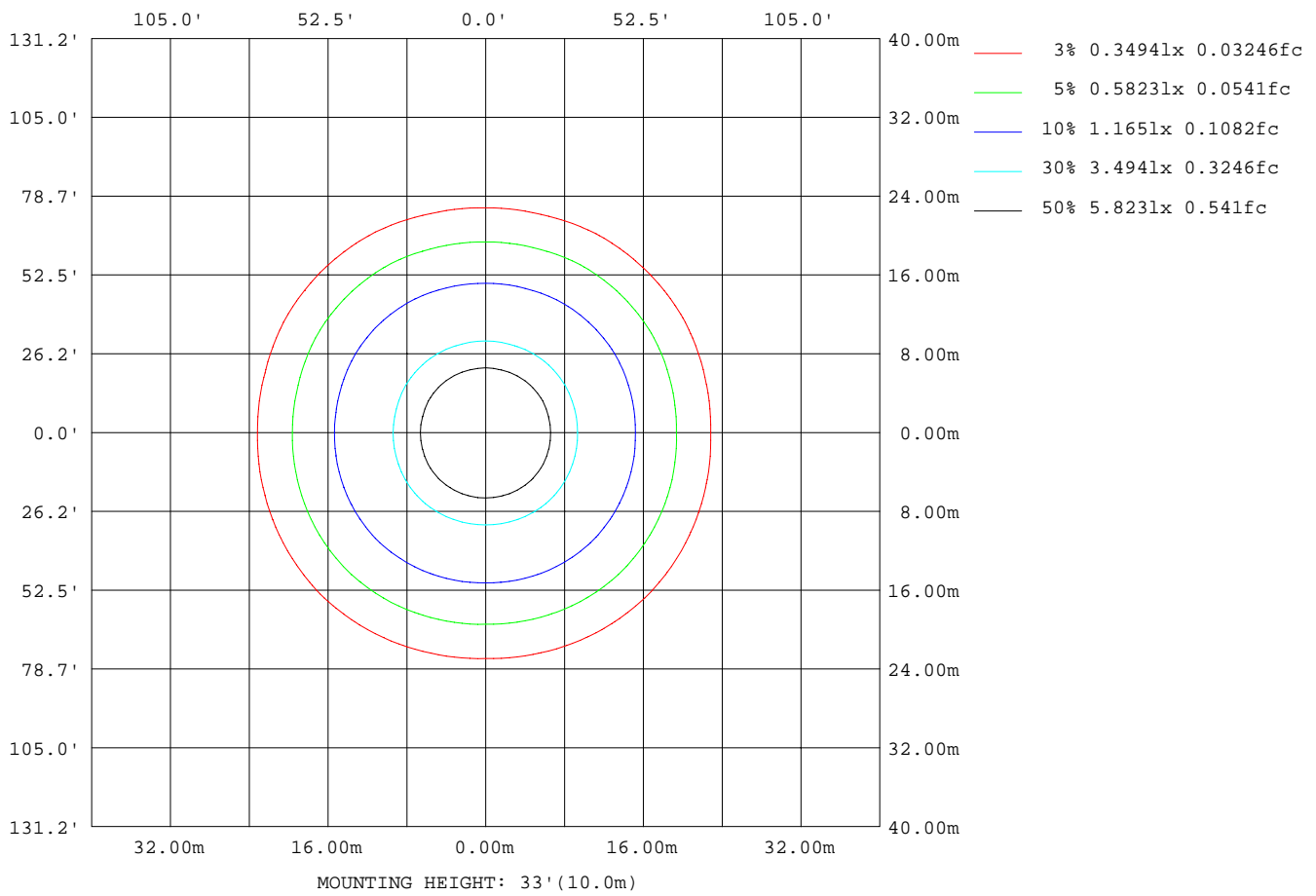
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

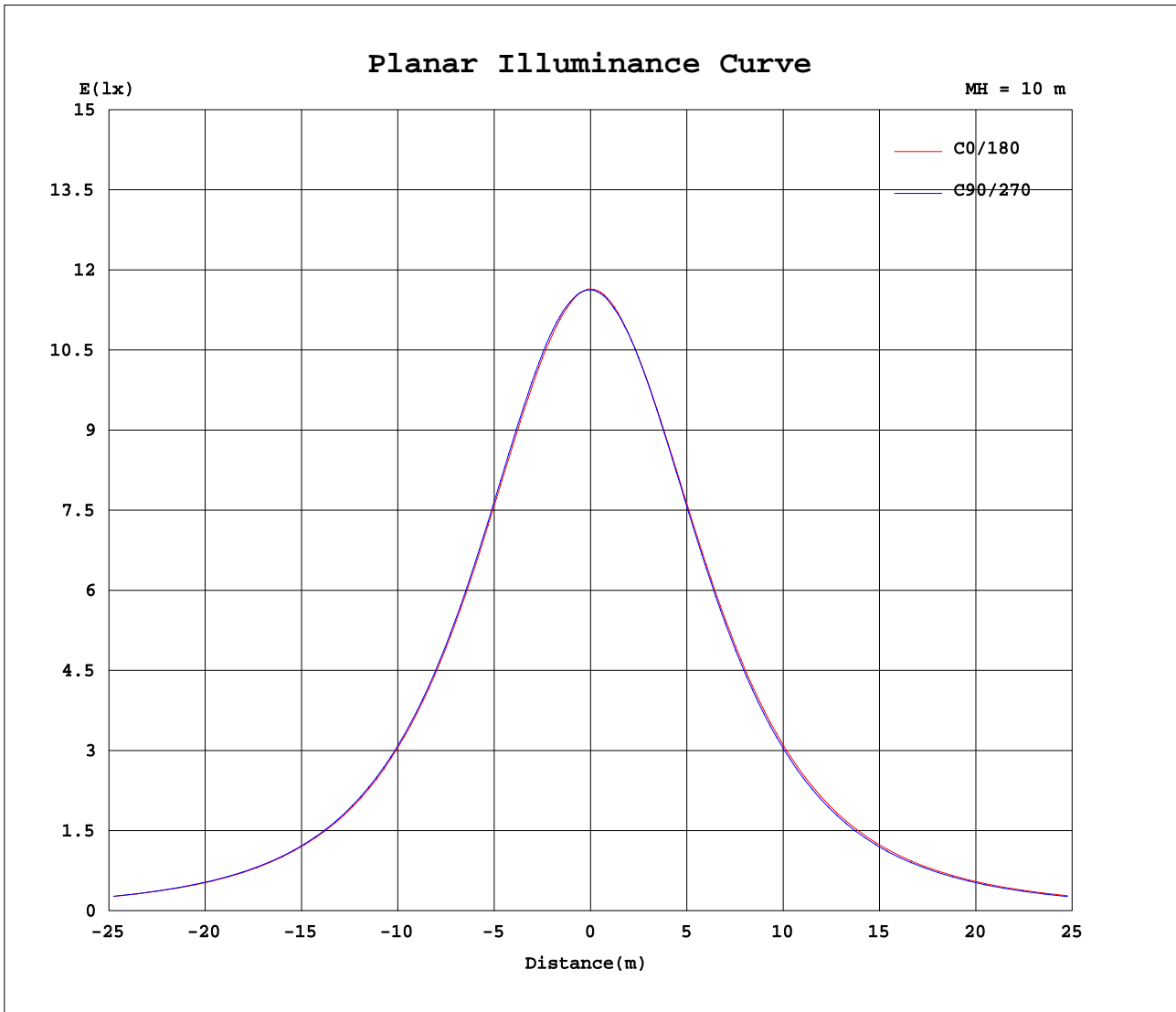
AvgL	cd/m2
L_0~180(65)av	3777
L_0~180(75)av	4328
L_0~180(85)av	7762
L_90~270(65)av	3725
L_90~270(75)av	4201
L_90~270(85)av	7263
L_45(65)av	3941
L_45(75)av	4640
L_45(85)av	8703

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Derek Lai
Test Date: 09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity: 40.9%
Test Distance: 2.500m [K=1.0621]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163
5	1157	1159	1159	1160	1160	1162	1161	1161	1161	1160	1161	1159	1159	1159	1158	1157	1158	1158	1158
10	1145	1147	1147	1149	1151	1154	1154	1154	1153	1151	1149	1147	1147	1145	1145	1145	1147	1147	1147
15	1128	1130	1131	1133	1135	1139	1139	1139	1137	1134	1132	1130	1130	1127	1126	1127	1128	1130	1130
20	1103	1107	1108	1112	1112	1115	1115	1115	1113	1112	1110	1107	1106	1104	1104	1104	1103	1104	1104
25	1070	1075	1078	1083	1081	1082	1083	1083	1082	1084	1081	1077	1075	1072	1074	1073	1071	1069	1071
30	1029	1036	1040	1046	1043	1041	1042	1042	1043	1047	1045	1039	1036	1033	1037	1036	1033	1027	1028
35	980	988	995	1001	997	993	993	994	998	1004	1001	994	991	987	993	992	987	978	979
40	925	934	942	949	945	938	937	939	946	953	950	942	936	934	942	942	935	923	923
45	863	874	883	890	886	878	875	878	888	896	892	884	877	876	886	884	877	862	861
50	795	807	818	825	820	812	807	813	823	833	829	820	812	812	823	821	813	797	793
55	723	735	746	755	749	740	734	741	754	764	760	750	742	743	754	753	744	726	721
60	645	658	670	679	674	664	656	665	679	690	686	678	667	669	682	680	673	651	645
65	562	577	590	599	593	581	572	583	599	611	608	598	587	591	604	602	594	570	562
70	476	492	505	515	507	495	484	497	516	529	525	514	504	508	522	521	511	487	477
75	389	405	419	428	420	406	393	408	429	443	440	428	418	423	439	438	428	402	390
80	305	320	336	344	334	319	304	320	342	358	355	343	332	338	356	355	344	317	303
85	233	246	261	269	260	244	228	244	266	280	278	265	254	261	279	279	269	243	228
90	101	127	118	121	120	111	110	115	122	138	128	154	175	150	176	153	159	123	123
95	41.0	10.7	62.5	73.5	102	143	153	142	105	74.8	64.9	3.73	22.8	125	4.14	57.1	88.5	112	106
100	77.2	85.8	71.9	73.2	75.5	83.3	85.5	85.2	76.0	72.4	77.8	97.9	100	97.3	83.3	71.4	72.9	74.5	67.9
105	57.4	66.6	73.1	82.8	83.9	77.2	68.3	76.3	84.1	83.7	77.2	70.4	61.4	67.9	73.6	82.3	82.3	75.1	66.0
110	53.5	65.3	75.9	85.0	83.3	75.4	65.9	74.7	83.7	86.0	75.3	67.5	59.7	66.5	91.9	84.7	82.5	73.5	54.3
115	22.6	46.6	78.9	83.0	80.1	72.1	62.9	71.7	80.8	84.3	80.0	57.6	40.7	57.7	73.1	83.0	79.8	68.1	51.4
120	42.7	51.9	53.5	83.1	76.8	68.5	59.4	67.8	77.1	80.7	78.4	59.8	49.7	52.0	53.4	106	74.7	61.6	45.7
125	0.74	27.9	58.3	84.8	73.2	64.6	56.5	64.1	72.8	85.0	62.4	26.8	17.3	32.5	60.3	74.0	109	66.7	47.1
130	38.8	44.4	55.8	39.5	78.6	65.5	54.9	64.2	77.1	45.1	58.8	50.5	42.4	46.9	56.8	31.0	72.1	92.2	94.4
135	37.5	39.8	33.0	52.5	33.8	64.1	62.8	68.8	37.0	57.4	52.2	28.0	26.6	23.5	21.5	50.6	18.0	13.9	47.8
140	35.4	33.0	26.8	39.4	49.1	58.3	22.7	55.7	57.6	48.9	40.9	40.9	37.6	38.8	38.4	44.8	50.5	40.4	35.4
145	14.5	23.8	29.0	20.3	37.9	38.5	37.3	38.4	40.7	22.6	39.2	34.3	32.5	32.6	34.9	18.0	30.1	36.0	36.0
150	18.7	16.9	23.1	27.9	14.3	27.1	23.6	26.8	18.7	27.2	33.1	29.4	29.2	21.3	31.9	29.3	11.0	14.5	5.17
155	22.3	17.9	22.6	22.4	19.6	13.0	6.60	10.5	21.9	25.1	24.0	13.9	22.7	13.8	22.3	23.1	23.1	16.6	13.7
160	21.9	16.4	20.7	19.6	16.7	13.7	14.2	17.7	21.9	23.5	16.9	6.97	13.5	13.7	17.0	24.5	22.8	20.6	18.9
165	13.7	15.7	9.23	12.0	10.1	6.69	9.91	12.8	15.4	16.0	12.9	11.8	12.1	17.2	8.24	16.2	15.1	12.2	10.4
170	10.7	11.0	9.18	5.18	3.03	5.36	6.16	7.28	9.17	4.73	5.44	10.3	11.4	11.3	13.1	4.80	4.27	3.86	6.27
175	9.05	7.87	7.53	7.13	6.68	5.78	5.15	5.18	7.23	8.45	8.28	9.09	9.54	9.58	9.36	9.08	7.92	6.89	9.01
180	11.5	11.7	11.6	12.0	12.3	12.3	12.5	12.3	12.4	12.2	11.2	11.6	11.5	11.7	11.6	12.0	12.3	12.3	12.5

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.3493A P:41.36W PF:0.9867 Freq:60.01Hz Lamp Flux:4547.06x1 lm		
NAME: ASD-LFL01-22D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1163	1163	1163	1163	1163														
5	1158	1157	1156	1158	1157														
10	1146	1146	1144	1145	1144														
15	1128	1128	1126	1127	1126														
20	1102	1102	1102	1104	1102														
25	1067	1070	1071	1073	1070														
30	1025	1030	1033	1035	1030														
35	975	984	987	989	983														
40	919	931	935	938	928														
45	858	871	876	878	867														
50	792	806	811	813	801														
55	721	736	741	743	730														
60	646	661	666	667	654														
65	564	584	586	588	573														
70	480	499	504	504	489														
75	394	414	419	419	402														
80	309	331	337	337	319														
85	236	257	264	264	246														
90	109	115	94.4	97.7	82.6														
95	127	83.5	57.4	79.1	119														
100	73.3	74.2	72.2	72.3	79.0														
105	72.3	80.7	77.7	71.2	65.1														
110	59.5	69.7	74.6	83.9	58.5														
115	55.6	62.8	72.2	63.7	41.6														
120	49.2	61.7	100	38.4	43.4														
125	58.4	102	72.5	52.4	33.2														
130	84.9	72.5	28.4	56.8	45.9														
135	18.1	21.9	53.0	30.3	44.0														
140	42.1	48.1	43.1	35.8	38.4														
145	40.7	41.2	20.4	34.0	32.6														
150	17.4	14.0	35.6	29.6	12.0														
155	19.0	24.9	26.9	28.9	18.4														
160	17.9	21.7	25.6	20.6	24.7														
165	10.8	14.9	16.1	8.91	16.9														
170	5.70	3.25	4.07	12.0	11.6														
175	6.93	7.04	7.64	8.20	8.35														
180	12.3	12.4	12.2	11.2	11.6														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163
3.0	1161	1161	1161	1162	1162	1163	1163	1162	1163	1162
6.0	1155	1156	1157	1157	1159	1160	1160	1160	1160	1159
9.0	1148	1150	1149	1152	1153	1156	1156	1156	1155	1153
12.0	1139	1141	1141	1143	1145	1148	1149	1150	1147	1145
15.0	1128	1130	1131	1133	1135	1139	1139	1139	1137	1134
18.0	1113	1117	1118	1122	1122	1125	1125	1126	1124	1122
21.0	1097	1101	1103	1107	1106	1108	1110	1110	1108	1107
24.0	1077	1082	1085	1089	1088	1089	1090	1090	1089	1090
27.0	1055	1060	1064	1069	1067	1067	1068	1068	1068	1070
30.0	1029	1036	1040	1046	1043	1041	1042	1042	1043	1047
33.0	1000	1008	1014	1020	1017	1013	1013	1014	1017	1022
36.0	969.8	977.9	985.3	991.0	987.0	982.7	982.2	984.0	988.5	994.2
39.0	936.4	945.5	953.9	959.9	955.5	949.7	948.7	950.6	956.7	963.2
42.0	900.5	910.6	919.8	926.3	921.1	914.9	912.7	915.7	923.3	930.7
45.0	862.9	873.7	883.2	890.4	885.9	878.3	874.8	878.4	887.7	896.1
48.0	822.7	834.0	844.8	852.2	846.9	838.8	835.5	839.1	849.9	858.4
51.0	780.8	792.6	803.4	811.2	806.0	797.1	792.9	798.5	809.7	819.4
54.0	737.4	750.0	760.9	769.3	764.0	754.6	749.0	756.2	768.0	777.8
57.0	693.5	705.2	716.6	725.0	719.2	709.9	703.7	711.4	724.3	734.7
60.0	644.8	658.3	670.1	679.1	673.7	663.5	655.6	664.9	679.2	690.0
63.0	595.7	610.1	622.3	631.3	625.9	614.0	605.8	616.4	632.0	643.2
66.0	545.0	560.4	573.0	581.7	576.3	563.9	554.5	566.3	582.8	595.4
69.0	493.9	509.5	522.4	531.6	524.8	512.3	501.6	514.4	532.4	545.6
72.0	441.2	457.3	471.2	480.2	472.3	459.1	447.5	461.8	480.9	495.1
75.0	388.9	404.8	419.5	428.4	419.9	405.6	393.0	408.0	428.6	443.5
78.0	337.5	353.2	368.5	377.2	368.0	352.4	339.2	355.0	376.3	392.2
81.0	288.6	304.0	319.5	328.0	318.3	302.0	287.8	303.8	325.8	341.8
84.0	245.2	259.4	275.1	282.7	273.4	256.5	241.3	257.1	279.4	294.8
87.0	210.3	220.4	235.7	237.6	234.8	218.6	205.5	219.1	239.4	251.8
90.0	100.5	127.4	117.6	121.0	119.9	111.3	109.6	115.4	122.3	138.5
93.0	26.00	0.8694	17.07	55.91	90.79	98.98	105.2	99.70	84.25	59.79
96.0	80.74	132.5	92.80	73.90	100.4	141.1	149.6	144.2	105.0	77.34
99.0	91.29	100.2	81.40	69.02	72.68	98.27	100.8	100.1	76.70	68.01
102.0	59.37	67.04	70.43	78.90	80.12	77.20	69.45	76.43	80.67	78.66
105.0	57.44	66.57	73.06	82.79	83.94	77.18	68.25	76.32	84.14	83.71
108.0	54.56	65.81	73.79	84.66	84.13	76.38	66.90	75.47	84.41	85.63
111.0	50.98	64.97	77.14	84.98	82.75	74.84	65.37	74.25	83.25	85.92
114.0	47.11	62.62	79.13	83.78	80.78	72.86	63.56	72.38	81.45	85.00
117.0	21.07	56.48	76.65	81.51	78.76	70.55	61.52	70.28	79.38	82.88
120.0	42.71	51.95	53.50	83.12	76.76	68.46	59.45	67.79	77.06	80.69
123.0	40.35	47.14	60.16	85.00	74.32	66.29	57.77	65.52	74.44	83.81
126.0	13.31	44.32	59.09	82.87	75.89	63.81	55.79	63.41	73.23	85.47
129.0	39.43	43.82	57.24	41.33	78.02	63.91	53.94	61.39	76.26	47.38
132.0	38.76	43.53	53.62	64.65	54.34	67.79	58.59	66.19	78.47	49.02
135.0	37.47	39.77	33.04	52.47	33.79	64.08	62.82	68.82	37.01	57.35
138.0	36.61	35.41	33.25	44.82	56.62	28.96	23.67	27.96	62.76	50.46
141.0	23.43	14.52	25.18	38.37	45.75	54.75	51.19	52.39	54.65	48.50
144.0	10.53	14.53	29.15	20.37	40.60	42.35	41.18	42.22	43.64	46.04
147.0	22.43	24.15	25.45	31.37	31.73	34.35	30.39	32.48	35.25	19.35
150.0	18.71	16.88	23.11	27.89	14.32	27.12	23.56	26.84	18.74	27.20
153.0	20.49	16.48	22.39	25.95	21.09	7.942	10.75	7.606	18.64	27.46
156.0	22.46	17.96	21.71	21.20	19.43	15.40	7.826	11.26	23.44	23.91
159.0	22.59	17.18	20.60	20.17	17.79	14.03	13.19	17.92	22.86	23.55
162.0	21.17	16.14	17.51	17.38	13.50	12.03	13.07	15.82	19.98	22.61
165.0	13.69	15.65	9.226	11.98	10.08	6.691	9.908	12.78	15.39	15.99
168.0	11.70	12.18	7.566	6.188	5.351	5.298	7.055	8.599	10.94	12.14
171.0	10.28	10.20	9.481	4.188	3.651	4.913	5.456	6.647	3.968	5.103
174.0	8.926	7.660	6.860	5.878	5.524	5.502	4.965	4.839	4.033	8.262
177.0	11.92	11.33	11.09	10.24	10.75	12.09	12.23	10.99	10.62	9.996
180.0	11.51	11.74	11.60	11.99	12.29	12.29	12.54	12.34	12.39	12.18
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1163	1163	1163	1163	1163	1163	1163	1163	1163	1163
3.0	1162	1162	1162	1162	1161	1161	1161	1161	1161	1160
6.0	1159	1158	1157	1157	1156	1155	1156	1156	1156	1156
9.0	1152	1151	1150	1149	1148	1148	1149	1150	1150	1148
12.0	1142	1141	1140	1139	1138	1139	1140	1141	1142	1140
15.0	1132	1130	1130	1127	1126	1127	1128	1130	1130	1128
18.0	1120	1117	1116	1113	1114	1113	1115	1115	1116	1113
21.0	1105	1102	1100	1098	1098	1098	1097	1097	1099	1095
24.0	1088	1084	1082	1079	1081	1080	1078	1077	1078	1075
27.0	1068	1062	1061	1058	1060	1059	1056	1054	1055	1052
30.0	1045	1039	1036	1033	1037	1036	1033	1027	1028	1025

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

Photometric Data Table [cd]

33.0	1020	1013	1009	1007	1012	1011	1007	998.7	999.0	996.3
36.0	991.4	984.3	980.8	977.6	983.2	982.7	976.6	967.5	968.6	964.7
39.0	960.8	953.0	948.1	945.6	952.7	952.4	944.9	934.6	934.4	931.2
42.0	927.7	919.0	914.0	911.9	920.3	919.1	912.0	899.9	898.6	896.2
45.0	892.1	883.8	877.0	876.0	885.8	884.0	876.8	862.0	860.9	858.2
48.0	854.8	845.8	838.8	838.0	848.7	846.8	839.7	823.6	820.8	819.8
51.0	815.9	806.1	799.2	798.5	809.4	807.5	800.0	782.8	778.8	778.0
54.0	773.9	764.3	756.7	756.9	768.2	766.7	759.0	740.1	735.2	735.5
57.0	731.2	721.3	712.7	713.9	725.8	724.1	715.9	696.5	689.8	690.9
60.0	686.2	677.9	666.8	669.0	681.7	679.9	673.5	651.4	645.4	646.0
63.0	640.1	630.2	619.4	622.8	635.5	633.6	626.4	603.2	595.5	598.0
66.0	591.5	581.6	571.0	574.5	588.0	586.3	578.0	553.6	544.7	547.0
69.0	541.8	531.3	520.9	524.9	539.0	537.3	528.2	504.4	494.0	496.8
72.0	491.7	480.3	469.6	474.3	489.5	488.0	478.3	453.2	441.9	446.6
75.0	440.0	428.1	417.6	422.8	438.9	438.0	427.7	401.7	389.8	393.9
78.0	389.0	376.6	365.1	371.5	388.5	387.8	377.4	350.6	337.3	342.8
81.0	339.1	326.6	315.4	321.8	339.7	339.2	328.5	301.1	286.9	292.9
84.0	292.1	279.7	268.6	275.6	293.7	293.7	282.9	256.0	241.9	248.8
87.0	250.6	239.2	229.0	235.6	252.7	252.9	242.5	219.6	203.9	213.4
90.0	128.1	153.7	175.2	150.3	176.2	152.8	159.1	123.3	123.1	109.2
93.0	23.19	0.7437	0.9220	115.1	42.88	67.72	82.68	93.76	101.2	93.37
96.0	88.24	119.8	35.79	130.1	86.34	64.33	84.58	120.5	128.4	113.9
99.0	86.30	110.6	116.1	112.0	92.48	66.95	69.13	75.41	73.62	72.64
102.0	77.03	72.18	72.67	69.29	72.03	77.78	78.13	75.15	67.24	73.21
105.0	77.15	70.37	61.40	67.94	73.61	82.34	82.28	75.07	66.03	72.28
108.0	75.93	67.86	60.45	67.03	76.37	84.21	83.02	74.37	64.22	67.17
111.0	75.24	67.20	59.38	66.11	87.69	84.45	82.05	72.90	52.52	59.59
114.0	78.95	65.85	58.00	64.94	75.60	83.56	80.48	69.53	51.88	58.06
117.0	81.26	60.13	7.087	59.02	72.03	94.34	76.41	60.54	46.05	52.61
120.0	78.37	59.85	49.71	51.98	53.45	105.6	74.68	61.58	45.72	49.25
123.0	47.96	30.85	37.54	35.97	63.17	82.99	92.42	60.60	47.05	49.28
126.0	62.05	50.78	7.920	48.14	58.91	71.52	100.8	79.48	52.78	71.72
129.0	59.57	50.32	43.16	46.82	57.47	31.70	78.90	99.81	97.43	91.44
132.0	48.70	49.28	41.24	45.86	34.21	55.42	24.17	72.44	81.56	73.19
135.0	52.18	27.99	26.57	23.54	21.54	50.60	17.99	13.94	47.79	18.15
138.0	31.54	38.72	12.18	39.06	43.00	47.11	50.40	29.23	7.130	11.78
141.0	41.86	39.53	36.87	37.52	38.47	22.28	49.70	39.51	37.63	43.27
144.0	40.67	35.15	33.00	33.08	36.10	18.67	41.60	37.47	37.03	41.43
147.0	36.73	32.28	31.37	31.47	33.49	28.57	7.154	32.01	33.21	38.07
150.0	33.15	29.41	29.18	21.28	31.91	29.33	10.95	14.53	5.169	17.39
153.0	27.52	26.51	26.23	17.95	26.55	26.76	22.06	8.994	5.067	11.49
156.0	23.14	11.94	20.59	11.73	20.92	22.20	24.40	18.75	16.81	20.28
159.0	18.28	7.788	15.56	14.57	17.75	19.95	23.38	21.47	19.71	18.91
162.0	14.73	6.179	11.94	14.31	4.656	22.26	20.65	19.45	17.32	16.88
165.0	12.89	11.78	12.12	17.17	8.239	16.16	15.07	12.18	10.40	10.79
168.0	5.867	11.12	12.32	13.09	6.531	5.013	11.62	9.266	7.759	9.353
171.0	4.764	10.07	10.80	10.98	12.02	5.019	3.140	3.677	4.547	5.453
174.0	8.156	9.219	9.129	9.699	8.849	8.761	8.215	6.007	6.477	5.993
177.0	10.79	11.08	11.49	11.53	11.35	11.22	11.97	13.21	13.34	13.34
180.0	11.24	11.56	11.51	11.73	11.60	11.99	12.29	12.30	12.54	12.34
G/C	300.0	315.0	330.0	345.0						
0.0	1163	1163	1163	1163						
3.0	1161	1159	1161	1161						
6.0	1155	1154	1155	1156						
9.0	1148	1147	1148	1147						
12.0	1139	1137	1138	1138						
15.0	1128	1126	1127	1126						
18.0	1113	1112	1114	1113						
21.0	1096	1096	1099	1097						
24.0	1077	1079	1080	1077						
27.0	1055	1057	1059	1055						
30.0	1030	1033	1035	1030						
33.0	1004	1007	1008	1002						
36.0	973.7	977.7	979.4	971.9						
39.0	942.0	946.5	948.3	939.1						
42.0	908.0	912.6	914.2	904.7						
45.0	871.1	875.8	878.1	867.2						
48.0	833.2	837.9	839.7	827.6						
51.0	793.3	797.6	799.6	787.3						
54.0	750.8	755.5	757.1	744.4						
57.0	707.1	711.8	713.0	700.6						
60.0	661.5	665.9	667.1	654.1						
63.0	615.8	618.6	619.7	605.8						
66.0	566.8	570.0	571.4	556.5						

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks:

Photometric Data Table [cd]

69.0	515.6	520.5	521.4	505.7
72.0	465.3	470.0	470.3	454.4
75.0	414.1	419.3	419.4	402.3
78.0	363.4	369.5	369.0	351.7
81.0	314.8	321.1	320.9	303.0
84.0	270.6	277.2	276.8	259.1
87.0	232.4	239.1	234.1	222.9
90.0	115.0	94.42	97.74	82.62
93.0	75.37	42.72	0.8186	103.3
96.0	77.33	58.26	87.83	127.3
99.0	70.88	68.75	76.29	94.28
102.0	77.92	77.02	72.00	65.28
105.0	80.74	77.75	71.20	65.05
108.0	69.64	74.52	70.55	61.14
111.0	69.31	73.47	79.46	55.16
114.0	65.44	72.52	67.86	52.98
117.0	62.75	88.28	60.71	50.61
120.0	61.72	100.3	38.38	43.44
123.0	82.54	78.14	52.25	28.05
126.0	96.81	66.37	53.85	43.94
129.0	75.72	29.27	57.18	45.69
132.0	23.64	53.74	54.62	45.72
135.0	21.86	53.02	30.31	43.95
138.0	48.84	45.98	38.00	42.13
141.0	47.52	19.82	34.12	21.44
144.0	43.21	20.37	35.91	19.40
147.0	15.52	40.95	31.13	25.49
150.0	14.00	35.58	29.65	11.96
153.0	29.33	31.33	29.46	16.96
156.0	25.06	25.82	27.90	18.36
159.0	22.34	26.02	25.69	20.96
162.0	19.39	22.47	10.54	23.50
165.0	14.90	16.11	8.907	16.88
168.0	8.139	6.467	13.18	13.13
171.0	3.170	5.644	11.36	10.87
174.0	5.944	6.201	7.549	8.354
177.0	11.83	10.13	10.96	11.92
180.0	12.39	12.20	11.24	11.57

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:Derek Lai
 Test Date:09 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 40.9%
 Test Distance:2.500m [K=1.0621]
 Remarks: